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8 CORP., MATROX TECH, INC., and  
AEROFLEX COLORADO SPRINGS, INC.  
9

10 UNITED STATES DISTRICT COURT  
11 NORTHERN DISTRICT OF CALIFORNIA  
12 SAN FRANCISCO DIVISION

13 RICOH COMPANY, LTD.,

14 Plaintiff,

15 vs.

16 AEROFLEX INCORPORATED, AMI  
SEMICONDUCTOR, INC., MATROX  
17 ELECTRONIC SYSTEMS LTD., MATROX  
GRAPHICS INC., MATROX  
INTERNATIONAL CORP., MATROX TECH,  
18 INC., AND AEROFLEX COLORADO  
SPRINGS, INC.  
19

20 Defendants.  
21  
22

23 SYNOPSYS, INC.,

24 Plaintiff,

25 vs.

26 RICOH COMPANY, LTD.,

27 Defendant.  
28

Case No. C03-04669 MJJ (EMC)

Case No. C03-02289 MJJ (EMC)

**NOTICE OF MOTION AND MOTION FOR  
SUMMARY JUDGMENT OF INVALIDITY  
OF U.S. PATENT NO. 4,922,432 FOR  
VIOLATION OF 35 U.S.C. § 102(f), OR, IN  
THE ALTERNATIVE, TO DISMISS FOR  
FAILURE TO JOIN ALL CO-OWNERS AS  
PLAINTIFFS**

**[Dispositive Motion No. 3]**

Date: September 26, 2006  
Time: 9:30 a.m.  
Courtroom: 11, 19th Floor  
Judge: Martin J. Jenkins

**REDACTED PUBLIC VERSION**

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**NOTICE OF MOTION AND MOTION**

PLEASE TAKE NOTICE that on September 26, 2006, at 9:30 a.m., before the Honorable Martin J. Jenkins in Courtroom 11, 19<sup>th</sup> Floor, in the United States District Court, 450 Golden Gate Avenue, San Francisco, California, Plaintiff Synopsys, Inc. ("Synopsys") and Defendants Aeroflex Incorporated, Aeroflex Colorado Springs, Inc., AMI Semiconductor, Inc., Matrox Electronic Systems Ltd., Matrox Graphics Inc., Matrox International Corp., and Matrox Tech, Inc. ("the Customer Defendants") will move for summary judgment pursuant to Rule 56 of the Federal Rules of Civil Procedure that U.S. Patent No. 4,922,432 ("the '432 Patent") is invalid for failure to comply with the statutory requirements of 35 U.S.C. § 102(f), or, alternatively, to dismiss this case for failure to join all co-inventors as plaintiffs as required by substantive patent law.

This motion is based on the memorandum of points and authorities set forth below, the accompanying declarations, exhibits, and proposed order, any argument of counsel at the hearing on this motion, and all other pleadings and matters of record in these actions.

**MEMORANDUM OF POINTS AND AUTHORITIES**

**I. INTRODUCTION**

Hideaki Kobayashi and Masahiro Shindo are not the only inventors of the '432 patent.<sup>1</sup> Many (if not most) of the ideas contained in the '432 patent are derived from work done from 1984-1987 by Dr. Kobayashi's graduate student, Simon Yoon-Pin Foo. In 1984, Dr. Foo wrote his master's thesis, with Dr. Kobayashi as advisor, explaining how one could create a database of hardware cells to use with a computer aided design system for designing computer chips. In 1986, Drs. Foo and Kobayashi jointly authored two published papers, one based upon Dr. Foo's master's thesis, the other based upon Dr. Foo's ongoing doctoral dissertation research into a knowledge-based silicon compiler. There is no dispute that these papers reflect Dr. Foo's ideas, and not Dr. Kobayashi's.

There is also no dispute that the papers describe ideas that appear in the claims and specification of the '432 patent. In addition to inventing the idea of a hardware cell database, Dr. Foo

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<sup>1</sup> For purposes of this motion only, Synopsys and the Customer Defendants do not challenge that Dr. Kobayashi and Mr. Shindo contributed to the conception of the claimed invention.

1 also invented the idea of a rule-based expert system for creating VLSI designs as described in the  
 2 claims of the '432 Patent and the cell selector module. Indeed, Dr. Foo created the specification for  
 3 and prototype of the cell selector module (called Neptune) that was included in the commercialized  
 4 KBSC system developed by Dr. Kobayashi's company, ICC, allegedly in joint partnership with  
 5 Ricoh.<sup>2</sup> Thus, Dr. Foo is an unnamed joint inventor of the '432 patent, making the patent invalid for  
 6 failure to comply with 35 U.S.C. § 102(f).

7 Although inventorship problems can be corrected, that route is not available here because  
 8 Ricoh has not requested such correction. But even if correction were requested and granted (which is  
 9 unlikely), this case would have to be dismissed because Dr. Foo is not a named plaintiff in this case, as  
 10 required by substantive patent law. Simply put, this case must be dismissed either because the patent  
 11 is invalid, or because not all co-owners of the patent joined in the case.

## 12 II. STATEMENT OF FACTS

13 In the 1980's, Simon Yoon-Pin Foo was an electrical engineering student at the University of  
 14 South Carolina. As an undergraduate, he was asked by Dr. Hideaki Kobayashi, the first-named  
 15 inventor on the '432 patent and a professor in the electrical engineering department at the university, to  
 16 work as a research assistant because Dr. Foo was one of the honor students in the electrical engineering  
 17 department. [Foo 5:25-6:25.] Dr. Foo completed his undergraduate degree and stayed on at the  
 18 university as a graduate student.

19 Dr. Kobayashi was Dr. Foo's advisor for his 1984 master's thesis, which was titled "Managing  
 20 VLSI CAD Data with a Relational Database System." Exh. 23 (Foo) at 8:4-16, Exh. 24.<sup>3</sup> This thesis  
 21 set forth one of the fundamental ideas that appears in the claims of the '432 patent — a database of  
 22 hardware cells that contain different levels of descriptions of the same functionality. Exh. 24 at 6. In  
 23 discussing this concept, Dr. Foo notes that there are multiple ways to describe a VLSI circuit (and the  
 24

25 <sup>2</sup> Synopsys and the Customer Defendants dispute when and by whom the KBSC was reduced to practice, but the Court  
 26 need not reach these issues with regard to this motion.

27 <sup>3</sup> Unless otherwise noted, all exhibits referenced in this motion are attached to the Declaration of Denise M. De Mory In  
 28 Support of Synopsys' and Customer Defendants' Summary Judgment Motions filed concurrently herewith. All deposition  
 references are likewise included in the De Mory Declaration.

1 cells in that circuit), including “functional descriptions, logic schematics, circuits, stick diagrams, and  
2 geometrical layouts.” *Id.* at 5. All of these descriptions are included in Dr. Foo’s cell database — “[a]  
3 chip design database contains information about how design objects are composed from primitives  
4 (such as geometries, transistors, and gates), how a design is represented (in layout, circuit, and logic),  
5 how the design has evolved over time, who is responsible for designing the parts, and so forth.” *Id.* at  
6 6. This idea and the others in the thesis were Dr. Foo’s alone; Dr. Kobayashi’s role as advisor, not  
7 surprisingly, was to make sure the topic was not out of date and to help edit the paper. Ex. 23 (Foo) at  
8 8:17-19; 9:6-10:5. At deposition, Dr. Foo was able to trace the inspiration for the ideas in his master’s  
9 thesis to a class in database engineering that Dr. Foo took in 1983 or 1984. *Id.* at 8:17-9:5.

10 While continuing towards his doctorate, Dr. Foo took a class in rule-based systems. As a  
11 project for that class, Dr. Foo decided to create a rule-based system for VLSI design. *Id.* at Foo 24:7-  
12 15. Dr. Foo came up with this idea independently, without assistance from Dr. Kobayashi. *Id.* at Foo  
13 24:1-6; 25:17-26:8; 94:19-95:9. Dr. Foo took a portion of this idea — the cell selector — to be his  
14 doctoral dissertation [*Id.* at Foo 39:17-24], even taking an independent study class with Dr. Kobayashi  
15 in the spring of 1986 where his goal was to “show how a combination of rules, backtracking, frames  
16 can be applied to translate behavioral descriptions directly to VLSI architecture.” [Foo Ex. 521;  
17 SC3406 (confirming Dr. Foo’s enrollment in the class).] The ideas stated on Dr. Foo’s self-study  
18 syllabus were his own. *Id.* at Foo 153:16-20. His proposed work included implementing the  
19 “matcher” and “selection” routines, as well as creating a netlist generator. Ex. 26 at 2.

20 In 1986, Dr. Foo co-authored two papers with Dr. Kobayashi regarding this rule-based VLSI  
21 design system. The first paper is entitled “A Framework for Managing VLSI CAD Data,” published in  
22 April 1986. Ex. 27. The second paper is “A Knowledge-Based System for VLSI Module Selection,”  
23 published in October 1986. Ex. 28. The first paper discusses a frame-based database for maintaining a  
24 hardware cell library. The second paper introduces a system called NEPTUNE, a frame-based  
25 database that selects VLSI modules based upon heuristic rules. [*Id.*] NEPTUNE has a database that  
26 describes available hardware cells, including implementation alternatives. *Id.* It will select cells that  
27 satisfy certain optimization criteria, and will search for an optimal solution by following a set of  
28

1 heuristic rules that appear on page 2 of the paper (spanning the first and second columns). Dr. Foo  
 2 wrote the NEPTUNE program on his own, without help from others. Ex. 23 Foo 143:14-17; 146:8-10.  
 3 *Id.* at 97:4-  
 4 7; Ex. 29 (Kobayashi) at 161:6-162:4; 178:12-24.

5 Ex. 29 (Kobayashi) at 162:10-11;  
 6 179:15-180:9. According to Dr. Foo, it is “not possible” that Dr. Kobayashi independently came up  
 7 with these ideas, because he had no background in VLSI design. Ex. 23 (Foo) at 131:4-17.

8 During 1986 and into the early part of 1987, Dr. Foo did some consulting work for ICC. He  
 9 stopped this work, though, as well as his entire research into a rule-based silicon compiler because Dr.  
 10 Kobayashi “blurred” the line between Dr. Foo’s dissertation work and his work with ICC. Ex. 23  
 11 (Foo) at 37:16-17. Dr. Kobayashi told Dr. Foo that he would not be granted his doctorate until he had  
 12 a commercially viable cell selection module completed. *Id.* at 31:11-32:11. Dr. Foo found this to be  
 13 an unethical requirement, and so he switched advisors. *Id.* at 31:11-19. Dr. Kobayashi then forced Dr.  
 14 Foo to switch his research topic to something other than rule-based VLSI design. *Id.* at Foo 35:10-23;  
 15 39:25-40:11. Dr. Foo did not learn of the ’432 patent until attorneys for Ricoh contacted him in 2002  
 16 or early 2003. *Id.* 19:21-20:5; 106:20-107:12.] When he found out about he ’432 patent, he was  
 17 “flabbergasted” and “disappointed,” and he holds the belief that at least some of the ideas in the ’432  
 18 patent derive from his work with Dr. Kobayashi. *Id.* at 17:4-14; 107:7-12; 159:20-160:3.

### 19 III. ARGUMENT

20 Summary judgment is granted to a moving party when “there is no genuine issue as to any  
 21 material fact” and the “moving party is entitled to judgment as a matter of law.” FED. R. CIV. P. 56(c).  
 22 Summary judgment is just as reasonable in a patent case as in any other case. *See Barmag Barmer*  
 23 *Maschinenfabrik AG v. Murata Mach., Ltd.*, 731 F.2d 831, 835 (Fed. Cir. 1984). Moreover,  
 24 “[s]ummary judgment is not a disfavored procedural shortcut, but rather an essential thread in the  
 25 fabric of the Federal Rules that eliminates unfounded claims without recourse to a costly and lengthy  
 26 trial.” *Colgate Palmolive Co. v. W.L. Gore & Assoc., Inc.*, 919 F. Supp. 767, 769 (D.N.J. 1996). Once  
 27 a party has made an initial showing that summary judgment is warranted, the opposing party may not  
 28 rest upon pleadings; rather, “the non-moving party must ‘designate specific facts showing that there is



a genuine issue for trial.” *Tinoco v. Belshe*, 916 F. Supp. 974, 979 (N.D. Cal. 1995) (quoting *Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986)). The Court may grant summary judgment if Ricoh’s evidence “is merely colorable, or is not significantly probative.” *Tinoco*, 916 F. Supp. at 979 (quoting *Anderson v. Liberty Lobby*, 477 U.S. 242, 249-250 (1986)).

**A. Simon Foo Is A Joint Inventor Of The ’432 Patent.**

A fundamental tenet of patent law is that any person who contributes to the conception of a portion of an invention is a joint inventor of the patent. *See* 35 U.S.C. § 116 (“When an invention is made by two or more persons jointly, they shall apply for patent jointly....”). “Because conception is the touchstone of inventorship, each joint inventor must generally contribute to the conception of the invention.” *Ethicon, Inc. v. United States Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998) (internal quotation marks omitted). Importantly, § 116 of the Patent Act explicitly notes that joint inventors need not work together at the same time, make the same type or amount of contribution to the patent, or even make a contribution to the subject matter of every claim of the patent. 35 U.S.C. § 116(1)-(3). The Federal Circuit has noted that § 116 “codifies] the principles stated in *Monsanto [Co. v. Kamp*, 269 F. Supp. 818, 824 (D.D.C. 1967)].” *Kimberly-Clark Corp. v. Proctor & Gamble Distributing Co.*, 973 F.2d 911, 916 (Fed. Cir. 1992). One of these principles is that “[i]t is not necessary that the entire inventive concept should occur to each of the joint inventors....” *Monsanto*, 269 F. Supp at 824, *quoted in Kimberly-Clark*, 973 F.2d at 916. In other words, “each [joint inventor] needs to perform only a part of the task which produces the invention.” *Ethicon*, 135 F.3d at 1460.

The Federal Circuit has explained clearly that

[a]ll that is required of a joint inventor is that he or she (1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art.

*Pannu v. Iolab Corp.*, 155 F.3d 1344, 1351 (Fed. Cir. 1998). In addition, for there to be joint inventorship, there must also be “at least some quantum of collaboration or connection.” *Kimberly-Clark*, 973 F.2d at 917.



1 In order for a missing inventor to demonstrate joint inventorship, he must prove his  
2 contribution to the conception of the claims by clear and convincing evidence. *Ethicon*, 135 F.3d at  
3 1461. This means that inventor testimony standing alone is insufficient; rather, evidence corroborating  
4 the testimony must be provided. *Id.* This corroborating evidence may take many forms, such as  
5 contemporaneous documents created by the joint inventor or circumstantial evidence about the  
6 inventive process. *Id.*

7 *Ethicon* is a clear example of the application of joint inventor law. In that case, the unnamed  
8 joint inventor, Choi, an electronics technician, collaborated with the named joint inventor, Yoon, a  
9 medical doctor, for eighteen months developing a certain type of improved medical device involving  
10 an electronic sensor. *Ethicon*, 135 F.3d at 1459. Ultimately, Yoon applied for and was granted a  
11 patent as a sole inventor, and Choi sought to be added as a joint inventor to the patent. *Id.* The court,  
12 based upon Choi's testimony and corroborating drawings, found that Choi contributed to the  
13 conception of a single element in each of two claims in a patent with fifty-five claims. *Id.* at 1459,  
14 1461-64. The court found that the Choi's claim of joint inventorship was further corroborated by  
15 circumstantial evidence, including the facts that Yoon needed someone with electronics experience and  
16 Choi had that experience. *Id.* at 1464. As a result, the Court held that Choi held an undivided interest  
17 in the entire patent, and was thus able to license the patent without the need to account to his co-owner.  
18 *Id.* at 1466 ("[W]here inventors choose to cooperate in the inventive process, their joint inventions may  
19 become joint property without some express agreement to the contrary.").

20 In light of this controlling authority, there can be no disputed issue of material fact that Dr. Foo  
21 is a joint inventor of the '432 patent. Dr. Foo (1) contributed in a significant manner both to the  
22 conception of the invention and the reduction to practice, (2) made a non-insignificant contribution to  
23 the claimed invention measured against the dimension of the full invention, and (3) did more than  
24 merely explain well-known concepts and/or the current state of the art. *See Pannu*, 155 F.3d at 1351.  
25 The elements of independent claim 13 (which, in subject matter, is similar to the other independent  
26 claims in the patent) demonstrates that Dr. Foo made significant contributions to the conception of the  
27 invention:

28 A computer-aided design process for designing an application specific  
integrated circuit which will perform a desired function comprising:

1 [A] storing a set of definitions of architecture independent actions and  
 2 conditions;  
 3 [B] storing data describing a set of available integrated circuit hardware  
 4 cells for performing the actions and conditions defined in the stored set;  
 5 [C] storing in an expert system knowledge base a set of a rules for  
 6 selecting hardware cells to perform the actions and conditions;  
 7 [D] describing for a proposed application specific integrated circuit a  
 8 series of architecture independent actions conditions;  
 9 [E] specifying for each described action and condition of the series of  
 10 one of said stored definitions which corresponds to the desired action or  
 11 condition to be performed; and  
 12 [F] selecting from said stored data for each of the specified definitions a  
 13 corresponding integrated circuit hardware cell for performing the desired  
 14 function of the application specific integrated circuit, said step of  
 15 selecting a hardware cell comprising applying to the specified definition  
 16 of the action or condition to be performed, a set of cell selection rules  
 17 stored in said expert system knowledge base and generating for the  
 18 selected integrated circuit hardware cells, a netlist defining the hardware  
 19 cells which are needed to perform the desired function of the integrated  
 20 circuit and the interconnection requirements therefor.

21 Of the six elements present in this claim, Dr. Foo contributed to the conception of at least B, C, and F  
 22 through his multi-year collaboration with Dr. Kobayashi.

23 Dr. Foo's master's thesis and the FAME paper form the basis for element B (storing hardware  
 24 cells) — both the thesis and the FAME paper spoke of storing descriptions of hardware cells in a  
 25 database. The thesis states that there could be “functional descriptions, logic schematics, circuits, stick  
 26 diagrams, and geometrical layouts,” and the patent discusses “functional level information,” “logic  
 27 level information,” “circuit level information,” and “layout level information.” '432 patent at 9:24-34.  
 28 The fact that Dr. Foo unquestionably came up with the ideas in the thesis and FAME papers without  
 Dr. Kobayashi's help, and that storage of descriptions of hardware cells is an element of a claim in the  
 '432 patent, on which Dr. Kobayashi is a named inventor, is sufficient to show that Dr. Foo is a joint  
 inventor.

The syllabus for Dr. Foo's self-study course in the spring of 1986, a course taught by Dr.  
 Kobayashi, demonstrates that Foo contributed to elements C and F of the '432 patent. In this  
 document, Dr. Foo notes that “most of the work on the knowledge base has been completed,” and that  
 he would create routines to “translate behavioral descriptions directly to VLSI architectures.” Ex. 27.  
 This shows that Dr. Foo had formed the idea underlying element C — storing rules in a knowledge  
 base — and that he had completed most of that task. Further, Dr. Foo came up with the major portions

1 of element F — using rules to select hardware cells, and translation of those cells into a netlist — and  
 2 he planned to reduce that to practice over the semester.

3 Indeed, Dr. Foo’s outline of a “Proposed FSM Translator” is as follows:

4 This expert translator will consist of five major blocks and a knowledge base.

5 These blocks serve to:

- 6 1. Make a state reduction and state assignment.
- 7 2. Match a possible implementation with the next state code.
- 8 3. Select a set of function modules to fulfill the specifications.
- 9 4. Evaluate the implementation constraints such as speed, area, etc.
- 10 5. Generate the interconnection netlists between modules.

11 [Foo Ex. 521.] It is clear that this is the fundamental concept behind the cell selector described in  
 12 element F when one compares this description with the specification of the ’432 patent. Columns 9  
 13 and 10 describes the cell list generation, cell selection functions, and netlist generation of KBSC.

14 1. “The first step of the cell list generation is the transformation of the flowchart description  
 15 into a structure that can be used by the Cell Selector. This structure is called a state list.” Col. 9:8-11;  
 16 see also Col. 10:15-16 (“read the flowchart intermediate file and build a statelist.”).

17 2. “The blocklist is generated from the statelist by the inference engine. The blocklist  
 18 contains a list of the functional blocks to be used in the integrated circuit.” Col. 9:12-14.

19 3. “The cell selector maps the blocks to cells selected from the cell library 34. It selects an  
 20 optimum cell for a block.” Col. 9:21-23.

21 4. “Optimize blocklist and datapath list and perform error checks.” Col. 10:24-25.

22 5. “The netlist is generated after the cells have been selected by PSCS.” Col. 9:64-65.

23 If there were any doubt remaining that Dr. Foo made a significant contribution to the  
 24 conception of the invention claimed in the ’432 patent, the Foo/Kobayashi NEPTUNE paper provides  
 25 further compelling evidence. NEPTUNE was the clear precursor to element F — it is a cell selection  
 26 module that uses rules to select hardware cells from a frame based database. NEPTUNE was so key to  
 27 the ’432 patent that this very program — noted as designed by Dr. Foo —  
 28

Ex. 30

at 25; Ex. 13 (Soderman) 510:11-14.

In addition to this direct evidence of Dr. Foo's contribution to the subject matter of the '432 patent, circumstantial evidence suggests that Dr. Foo was a joint inventor of the '432 patent.

. Ex. 29 (Kobayashi) at 368:19-369:4; Ex. 32 [RCL0011958B (translated)];<sup>4</sup> *see also* Ex. 23 (Foo) 131:4-12. By contrast, Dr. Foo was an expert in VLSI design at the time. Ex. 23 (Foo) 131:13-17. In addition, Dr. Foo could program a computer, while Dr. Kobayashi did not.

Based on the foregoing direct and circumstantial evidence, Dr. Foo clearly contributed to the conception of the invention claimed in the '432 patent. He collaborated for years with Dr. Kobayashi (who was his advisor and co-author), who lacked the expertise necessary to come up with the type of invention claimed in the patent. This is the hallmark of joint inventorship, so Dr. Foo is an (unnamed) joint inventor of the patent.

**B. Because Dr. Foo Is Not A Named Inventor On The '432 Patent, The Patent Is Invalid In Its Entirety.**

"[I]f nonjoinder of an actual inventor is proved by clear and convincing evidence, a patent is rendered invalid." *Pannu* at 155 F.3d 1344, 1349 (citations omitted). This is because 35 U.S.C. § 102(f), which requires the named inventors to "[them]selves invent the subject matter sought to be patented," "mandates that a patent accurately list the correct inventors of a claimed invention." *Id.* Because, as demonstrated above, Dr. Foo is a joint inventor, but is not named as such on the patent, the '432 patent is invalid, and summary judgment of invalidity can be entered.

**C. Even if Inventorship Were Corrected, This Case Must be Dismissed for Failure to Include All Co-owners as Plaintiffs.**

It is conceivable that Ricoh could attempt to stave off the invalidity of the '432 patent by petitioning the Court to correct inventorship on the '432 patent under 35 U.S.C. § 256 (although Synopsys and the Customer Defendants do not believe this would occur). It is also possible (though unlikely) that the Court could find circumstances warrant such relief. While correction of inventorship could prevent the '432 patent from being found invalid, it would still require the dismissal of this case.

Substantive patent law requires all co-owners of a patent to join in the prosecution of an infringement case, ordinarily voluntarily. *See Ethicon*, 135 F.3d at 1467-68. That has not happened here. Although Ricoh has purchased ICC's interest, it does not own Dr. Foo's interest in the patent. Dr. Foo worked as a consultant to ICC in 1986, well after he had developed the fundamental ideas that led to the creation of ICC's KBSC system, and without any direction from ICC or use of ICC resources. Ex. 23 (Foo) at 71:25-72:9; 136:6-14. Dr. Foo stated that he did not sign any agreement with ICC assigning patent rights. *Id.* at 47:23-48:20. Nor is there any evidence that Dr. Foo assigned his rights directly to Ricoh. Although it is possible that Dr. Foo's interest in the patent is owned by the University of South Carolina [*Id.* at 49:3-15], the Court need not determine this issue. It is enough that there is another owner out there — whether Dr. Foo or the university — which is not joined in this litigation as a plaintiff. *See, e.g., Ethicon* 135 F.3d at 1468 ("Ethicon's complaint lacks the participation of a co-owner of the patent. Accordingly, this court must order dismissal of this suit.").

**IV. CONCLUSION**

Because Simon Foo contributed to the conception of the ideas claimed as the invention in the '432 patent, he should have been named as a joint inventor on the patent. Because he is not named on the patent, it is invalid under § 102(f), unless inventorship were to be corrected. Even if inventorship were corrected, this case would have to be dismissed because Dr. Foo, a joint inventor and co-owner of the patent, is not a party to this suit. Therefore, Synopsys and the Customer Defendants respectfully

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/////

1 request the Court to grant their motion for summary judgment of invalidity or, in the alternative, for  
2 dismissal for failure to join all co-owners in this suit.

3 Dated: August 18, 2006

HOWREY LLP

4  
5 By: /s/Denise M. De Mory

6 Denise M. De Mory  
7 Attorney for Plaintiff SYNOPSYS, INC.  
8 and Defendants AEROFLEX  
9 INCORPORATED, AMI  
10 SEMICONDUCTOR, INC., MATROX  
11 ELECTRONIC SYSTEMS, LTD.,  
12 MATROX GRAPHICS INC., MATROX  
13 INTERNATIONAL CORP., MATROX  
14 TECH, INC., and AEROFLEX  
15 COLORADO SPRINGS, INC.  
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